DOCUMENT RESUME

ED 193 861 EC 130 836

AUTHOR Yanoff, Jay M.
TITLE An Alternative Model to Diagnostic and Prescriptive Teaching.
PUB DATE Jul 78
NOTE 17p.; Paper presented to the Canadian School Trustees' Association Congress on Education (1st, Toronto, Ontario, Canada, June 20, 1978).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Diagnostic Teaching; *Disabilities; Elementary Secondary Education; *Learning Processes; *Learning Theories; *Models; Student Teacher Relationship; *Teaching Methods
IDENTIFIERS *Piaget (Jean)

ABSTRACT

The paper describes the diagnostic and prescriptive medical model used by most special educators and presents an alternative model based on the work of Jean Piaget. The author contends that the presently used model is useless both educationally and for research purposes because the teaching and learning process is more complex than the medical model allows. The author lists both the strengths and weaknesses of the diagnostic and prescriptive model. Steps in the author's alternative model include observing, recording, projecting, evaluating, and altering. It is suggested that this model is a viable alternative for research purposes and for day to day use in the classroom because it matches the instructional process between student and teacher. (Author/PHR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED193861

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

AN ALTERNATIVE MODEL

TO DIAGNOSTIC AND PRESCRIPTIVE TEACHING

Jay M. Yanoff, Ed.D.
Associate Director for Education
Area Health Education Center Program
College of Medicine and Dentistry of New Jersey

and

Associate Professor
Department of Family Practice
CMDNJ-New Jersey School of Osteopathic Medicine
Camden, New Jersey 08104

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
J. YANOFF
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented to the Canadian School Trustees'Association
First Congress on Education
Toronto, Ontario Canada June 20, 1978

EC 130836

Introduction

The recent court decisions in the United States giving due process to students and their parents ("The Education for All Handicapped Children Act," PL 94-142) has helped to provide greater service and accountability for not only handicapped but all students in public schools. The legislation has forced teachers (1) to provide educational programs which are appropriate to each child's differences and (2) to document how this was done so that if questioned, each child could be shown to have been provided with an individualized approach. This is a very exciting challange for those of us who have been advocating individualized, personalized and humanized education for many years. It means that each child must now, by law, be given an educational program unique to him. It also means that if the parent or

---

Dr. Jay M. Yanoff is the Associate Director for Education for the College of Medicine and Dentistry of New Jersey's Area Health Center Program/ He is also an Associate Professor in the Department of Family Practice, CMDNJ-New Jersey School of Osteopathic Medicine. Dr. Yanoff has been a teacher, principal, supervisor, and college instructor working in learning disabilities, academically talented, early childhood education, open education, medical and dental education, and group processes. He has published over 50 articles and co-authored three books: The Psychology of Open Teaching and Learning (Little, Brown, and Co., 1972): Real Learning: A Sourcebook for Teachers (Little, Brown and Co., 1976): and Teaching without Failure (in preparation)/

child asks how this was provided, the school (teacher, principal, administration) must show the process. Thus, we now have several enormous problems:

(1) How do we educate our present teaching staffs to use individualized techniques in their classrooms?

(2) How do we teach educators to evaluate the relative strengths and weaknesses of students so that individual plans can be developed?

(3) Finally, what specific process can be used to document what has occurred so that it facilitates rather than hinders the learning process?

As usual, the teacher is the person most on the firing line, for he must now spend much more of his time not only planning for each child but documenting, in writing, what he has done and what has resulted. It is the teacher who feels the impact daily; this can be either negative or positive, depending upon what we teacher trainers do to help the classroom teacher. This author contends that the present medical model used for diagnostic and prescriptive teaching is inadequate and will lead to negative results in the classroom. An alternative model is advocated and presented which satisfies all the demands of the law while at the same time allows for implementation of a more truly individ-

ualized program, the purpose of this due process legislation. It is incumbent upon us to use this legislation to help further what we do for children rather than using it simply to place categories and labels upon students. Much needs to be done to begin to train teachers, and this author believes it is better to start now than to wait until we are faced with legal, class action suits.

This paper will examine the advantages and disadvantages of the medical model and will then present the alternative model. The reader can then decide for himself which model he thinks will best satisfy his goals for himself and his students.

The Medical Model

The medical model is basically a diagnostic-prescriptive technique used in medicine/dentistry. It works as follows: (1) the doctor examines (tests) the patient to determine what is wrong, (2) when he has read the data he collects, he then develops a treatment plan and determines the prognosis (his estimate of the likelihood that the treatment will cure the patient), (3) he then performs the treatment, (4) finally, he observes and retests to determine if the plan had the positive effect; if not, a new plan is implemented. Medicine attempts to find etiology to disease. Thus, whenever a patient comes to a doctor's office, it is usually because something is wrong with him. Only recently has medical philosophy

advocated prevention rather than cure. Education, on the other hand, has not and must not take the approach that something is wrong with all students and the teacher's responsibility is to find out what that is and to teach to that weakness.

There are several problems with any diagnostic procedure:

(1) we must assume that all diagnostic tests have been administered

(2) we must assume that the tests really measure what they are supposed to measure (valid tests)

(3) the teacher must then be able to analyze the data correctly

(4) if the diagnosis is correct, the prescription must then fit the diagnosis (Inappropriate diagnosis leads to inappropriate treatment plan).

Today, we now have many children who are taken from place to place to be diagnosed, with each place giving the child a label, then professing, "We do not treat; we can only tell you what is wrong with your child." We definitely have an overly diagnosed country with very few new classroom activities for students. This author believes that we had better begin developing strong educational programs which facilitate "real learning" (Silberman, Allender and Yanoff, 1976), than to continue

to diagnose students. Let us get on with the positive aspects of school.

Another major problem with the medical model rests in the eyes of the evaluator/diagnostician. Some specific examples: Golman (1976) states, "Even the best-intentioned physician can make mistakes in diagnosis." Maslow (1971) concludes that, "The results of the intelligence test will tell you more about the person giving the test than the person taking the test." Sheehy (1976) asked professional psychiatrists to evaluate case histories for a book she was writing. She had the same cases examined by different psychiatrists and asked for their opinions. Some accepted a case history as true whereas another would not accept the history as typical of his experiences. She states that, in effect, "These were not comments on the validity of the material but Rorschach tests of the people reading it." (p. 18) This author's experience and research (1973) has shown that certain teachers make many recommendations (labels) and that their suggestions tend to be similar for most students. That is, the problem solver is using a very limited repertoire of information in making decisions about students. I would like to share a personal experience here to further emphasize this point. While a neophyte teacher, I was asked to diagnose students at a university diagnostic center. I gave each student a battery of motor, visual and auditory, perceptual,

intellectual and academic tests as well as collecting data from the parent and school. After evaluating hundreds of students, I realized that no matter what I saw in the evaluation, the mentor who later spoke with parents always recommended the same things (for example: gross motor activity, reduced stimuli, small classes, etc.) This is not to say that any of these recommendations was negative. In fact, I have found them all to be excellent for children. The problem was that the children were labeled "perceptually handicapped" and sent back with that stigma upon them. The diagnosis made no real difference in what happened to the child except if he was placed in a special class. I look for the day when all classes are special, individualized if you will, and each child is treated as being unique. Tests assume that everyone is alike and performs the same; I believe everyone is different, unique and special. Buscaglia (1971) believes that the diagnostic and prescriptive technique places labels on students which do not help them; it only distances the teacher from the student.

It also may be that in education, the teacher cannot diagnose and make prescriptions because the teaching and learning process is much more complex than a simple etiology/medication/cure process. Education deals with the multi-complex mind, not a predictable etiology. To be more specific, we know that children cannot be taught

to read but rather learn to read (Yanoff, 1976). If we know how to teach children to read, then why are there so many children reaching the upper grades unable to read -- this at a time when more than ever before, diagnostic and prescriptive techniques have been employed in schools (Waugh and Giles, 1971; Bush and Giles, 1969). Also, there is little data to indicate that teaching to a child's diagnosed weaknesses helps him educationally. The only tests this educator feels now are applicable are those done by neurologists analyzing students' neurological responses to evoked potentials, "a measure which describes the detailed response of the brain to messages from the senses." (Golman, 1976; John, 1976).

Yanoff (1972) believes that "output" on any educational, psychological or intelligence test is dramatically less than that which the student has integrated into his mental templates. We know students assimilate and accommodate information (Piaget, 1952), yet we do not have adequate tests for tapping the data. This is not to deny that learning is occurring, only that we do not have educational tests for measuring it. Some educators are so naive as to assume that if it cannot be measured, it does not exist. This author contends that it is not important to measure it; let us get on with the process and stop worrying about whether it can be measured or not. With all the disadvantages that

this author sees with the diagnostic and prescriptive model, there are some advantages:

(1) there are many, easy to administer tests now available (quality questionable)

(2) the process takes responsibility off the teacher and puts it on tests (tests and texts are made accountable, not teachers)

(3) numbers can be applied to show growth from pre to post test ("he has increased reading by three months according to the _____ test," whatever that means)

(4) it is the only model that is presently taught to future educators.

I want to present an alternative for teachers' consideration

An Alternative: The Process Model

It is my belief that Piaget has two major contributions to education: (1) his developmental theories of how children learn and (2) the method he used for his research. It is the latter which is germane to the model recommended here. Piaget (1952) observed in detail, documenting without evaluating. He described what he saw; his tests were not formalized nor statistically valid or reliable. His observations were biased from his perceptions. Yanoff (1972) contends that all evaluation is biased even by the initial question being asked by the researcher and nothing is generalizable. If that is

true, then why not just do the best we can in making decisions with the knowledge that there is no way of avoiding observer/researcher bias.

The alternative model has the following steps:

(1) Observing

(2) Recording

(3) Projecting

(4) Evaluating

(5) Altering

(1) Observing: Observing is both the beginning step of this process and a continual activity throughout. To begin, the teacher needs to be aware of the student's behavior, his interaction with his peers and environment, and what parts of the classroom seem to attract his interest. If the teacher needs to look at previous data (permanent records, etc.) on the child, he would have to be aware that the data is biased by other teachers' perceptions and that this information could alter immediately how he sees this child. I suggest beginning the observation process without looking at previous records; perhaps the teacher could refer back to the records once decisions are made about the student. In that way, the student and teacher have an opportunity to "feel out" one another and develop a teaching and learning plan together rather than it being devised based upon a previous teacher's perceptions.

To implement the observation process, I suggest

that the teacher provide a room full of alternatives for students to work independently. The teacher would provide a variety of work stations; some requiring academic skills, others more affectively oriented. The teacher would move around as a facilitator and note what attracted students, how they interacted, what they said to the teacher, their attention span, what skills they demonstrated, and what strengths the teacher could identify. The teacher would make small notes about his perceptions which would help in the next step of the process.

The reader should be aware now that observation skills will need to be developed in teachers. They will now need to (1) constantly observe in the classroom as accurately as possible, (2) be able to trust their perceptions, and (3) accept student input for more reliable decision-making.

(2) Recording: Recording means that the teacher would document what he has observed. This is best done in the format of a journal. Since this is a teacher's own views, the information should be as specific as possible. That is, statements should read, "I observed Johnny doing..." or describe specifically what was happening, "Sue picked up the pencil in her right hand and then switched it back and forth between hands before starting to write with her left hand." The teacher should avoid generalizations and value judgments whenever possible. For example, "He is hyperactive" or

"She must come from a problem home" are not helpful in this process.

Although it is very difficult to get people to record their observations, it will be an extremely worthwhile endeavor for teachers. I believe that this exercise helps teachers to be more realistic about the students with whom they work. They will begin to really see what students are doing. There is little question that documentation will be the most difficult problem with this process because it is so time consuming. However, I believe this data is the only legitimate information of the classroom. We must not be deferred from this documentation process simply because it is difficult for teachers. I believe it will help each person to become a more aware teacher as a result.

(3) Projecting: By this stage, the teacher has observed certain behaviors in a student and talked with him. Now the teacher develops an individual plan. In diagnostic and prescriptive teaching, this is usually a plan for the entire year. I think this is unrealistic. Projecting here means that the teacher realizes, "From this little information on the child, I am now going to..." This may mean a plan for only the next day or week. The teacher is simply laying out a strategy for approaching the student. The word "strategy" here is important because the teacher is deciding the "hows" of education as well as the "whats." The teacher should

use all the educational philosophies and skills he has to set forth his plan. Thus, the teacher should focus upon how children learn and strategies which facilitate that process (Silberman, Allender and Yanoff, 1976).

(4) Evaluation: Once the educational plan has been implemented, the teacher and student must decide if the appropriate decision was made. This demands observation by the teacher and open discussion with the student. The teacher's observation process here is more personalized than in diagnostic and prescriptive teaching. In the latter, the test is responsible for the decision; in this process, the teacher is responsible and thus more open to change in the middle. It is as important to know that the plan is not working and can be changed than it is to continue with an inappropriate plan. Let me cite an example that happened to a student I evaluated several years ago. R's school reported that he was having trouble learning and had little auditory differentiation. Thus, they had had him in a phonics approach to reading for the past six years. Whenever he read, he would "try to avoid the assignments." I asked that a computerized neurological be performed with both auditory and visual evoked potentials being measured against his normal electroencephlogram (E.E.G.). When this was performed and analyzed by the computer, it was found that even though the child received the auditory stimuli at the organ level (ears), the brain did not register any

differentiation at varying frequency levels. Note here that words are much more complex than the simply frequency tones that this child was being fed. I had a difficult time then convincing the school to use a whole word approach with this student because their tests showed he was deficient in phonics and should thus be given more phonetic experiences. The key concept here should be: Teach to the child's strengths rather than attempting to remediate his weaknesses.

(5) Altering: Altering is a process which I sometimes call "redefinition." It means that the teacher has been involved, made a decision, has learned more, and must now make alterations in the strategy. This is a self-analysis, an ability to say, "It looks like I am on the right track" or "I think that this has not worked and now I need to try..." The teacher must be profoundly honest with himself. To say that having tried something and found it not to work is important data in planning future strategies.

As the reader can see, this process never stops; it simply continues through the year, teacher and student together attempting to observe, document, plan and alter according to what works and what does not in the classroom.

It is my belief that the alternative model of documentation and decision making has some problems. However, the advantages far outweigh the disadvantages in

comparison to diagnostic and prescriptive teaching techniques. The disadvantages include needs for (1) more teacher time in school to document, (2) training in more humane approaches to education and (3) more supervisory feedback for teachers as they try these new techniques. Lastly, it requires a realization by teachers that they need not be right all the time; they are prone to error, just like students; they are working with human beings whose minds are highly complex, personal, and generally unpredictable.

Overview

Since due process legislation has required that teachers provide individualized education for all students and that they be able to document that process, I have been concerned. I knew that the only conceptual model available for teachers was the diagnostic and prescriptive teaching techniques. As a practitioner of that model, I knew it had many weaknesses. I was asked to work with teachers on the problem, and I developed an alternative model which I think has advantages over the diagnostic and prescriptive approach. Only when the alternative model is implemented fully will we know all of its strengths and weaknesses. For the sake of students, I highly advocate its development and use in the classroom. It not only satisfies all the requirements of the law for due process documentation but is a valuable tool for teachers to have and use.

REFERENCES

Buscaglia, L. "Love as a Behavior Modifier." Dallas: Texas Association for Children with Learning Disabilities, 1971.

Bush, W. J. and Giles, M. T. Aids to Psycholinguistic Teaching. Columbus, Ohio: Charles E. Merrill Publishing Company, 1969.

Golman, Daniel. "A New Computer Test of the Brain." Psychology Today, May, 1976.

John, E. Roy. "How the Brain Works - A New Theory." Psychology Today, May, 1976.

Maslow, A. H. The Farther Reaches of Human Nature. New York: The Viking Press, 1971

Piaget, J. The Origins of Intelligence in Children. New York: W. W. Norton and Co., 1952.

Sheehy, Gail. Passages: Predictable Crises of Adult Life. New York: E. P. Dutton and Co., 1976.

Silberman, M. L., Allender, J. S., and Yanoff, J. M. Real Learning: A Sourcebook for Teachers. Boston: Little, Brown and Co., 1976.

Waugh, K. W. and Bush, W. J. Diagnosing Learning Disorders. Columbus, Ohio: Charles E. Merrill Co., 1971.

Yanoff, J. M. "The Functions of the Mind in the Learning Process" in The Psychology of Open Teaching and Learning. Silberman, M. L., Allender, J. S. and Yanoff, J. M. (eds.) Boston: Little Brown and Co., 1972.

Yanoff, J. M. "The Effects of Open Teaching Styles for the Prevention of Learning Disabilities." Paper presented to the Association for Children with Learning Disabilities, Detroit, March, 1973.

Yanoff, J. M. "The Participant-Evaluator: The Quality Control Engineer in Education." (Mimeographed) School District of Philadelphia, 1974.

Yanoff, J. M. "Establishing an Educational System Responsive to the Cognitive and Emotional Development of Adolescents." New Jersey: Governor's Commission on Adolescent Education, New Jersey State Department of Education, 1976.